

Response under 37 CFR 1.111
Serial No. 10/781,699
Attorney Docket No. 042115

REMARKS

Claims 1 - 3 are pending in the present application. By this Amendment, claim 1 has been amended. No new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated August 25, 2005.

As To The Merits:

As to the merits of this case, the Examiner sets forth the following rejection:

claims 1-3 stand rejected under 35 USC 103(a) as being unpatentable over Zhu et al. (U.S. Publication No. 2003/0198064) in view of Akerson (U.S. Patent No. 6,344,985).

This rejection is respectfully traversed.

Claim 1, as amended, now calls for *an LC resonant circuit is provided between the winding wire for the high-voltage side and the switching section for the higher voltage side, or between the winding wire for the low-voltage side and the switching section for the lower voltage side, which causes the current flowing on the winding wire of the low and high voltage sides to have sinusoidal waveforms.*

For example, as discussed on page 11 of the present specification, in the two-way DC-DC converter (Fig. 3A) the primary-side current with a sinusoidal wave form shown by dotted and dashed lines in Fig. 3B flows on the primary side and the secondary-side current with a sinusoidal wave form shown by solid lines in Fig. 3B flows on the secondary side. This is caused by the existence of the LC resonant circuit 6.

It is submitted that the Examiner properly acknowledges that “Zhu et al, however, does not disclose an LC resonant circuit provided between the winding wire for the high-voltage side and the switching section for the higher voltage side, or between the winding wire for the low-voltage side and the switching section for the lower voltage side,”¹

Moreover, it is respectfully submitted that the Akerson reference fails to disclose that the current waveforms on the windings (i.e., the current waveform diagrams of Figs. 5 and 6) have a sinusoidal wave form.

As such, it is respectfully submitted that the Zhu et al. and Akerson, singly or in combination, fail to disclose or fairly suggest the features of claim 1, as amended, concerning *an LC resonant circuit is provided between the winding wire for the high-voltage side and the switching section for the higher voltage side, or between the winding wire for the low-voltage*

¹ Please see, lines 6-9, page 3 of the Action.

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side and the switching section for the lower voltage side, which causes the current flowing on the winding wire of the low and high voltage sides to have sinusoidal waveforms.

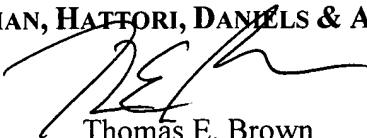
In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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